

# Advanced Manufacturing

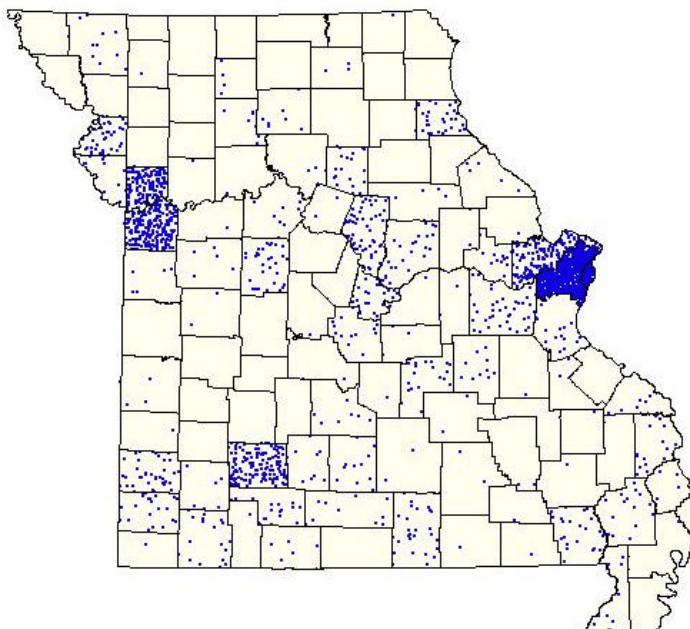
## INDUSTRY DESCRIPTION

The Advanced Manufacturing industry includes firms engaged in the design and development of new manufacturing products or processes through the application of scientific knowledge. According to the U.S. Bureau of Labor Statistics, this industry includes: inorganic and organic chemicals, plastics, drugs, soaps and cleaners, paints, agricultural chemicals, petroleum refining, ordnance, engines and turbines, construction and industrial machinery, computers, electric equipment, electronics, communications devices, motor vehicles, aircraft, missiles and space vehicles, medical instruments, and measuring and navigation equipment.

## ADVANCED MANUFACTURING MISSOURI INDICATORS, 1990-2000

	1990	2000	Percent Change
Total Employment	153,673	121,520	-20.9% 
Total Wages in Millions (2000 Dollars)	\$7,014.2	\$6,372.9	-9.1% 
Annual Wage Per Job (2000 Dollars)	\$45,637	\$52,430	14.9% 
Total Establishments	1,168	1,348	15.3% 

Source: *Covered Employment & Wages, MO Economic Development*



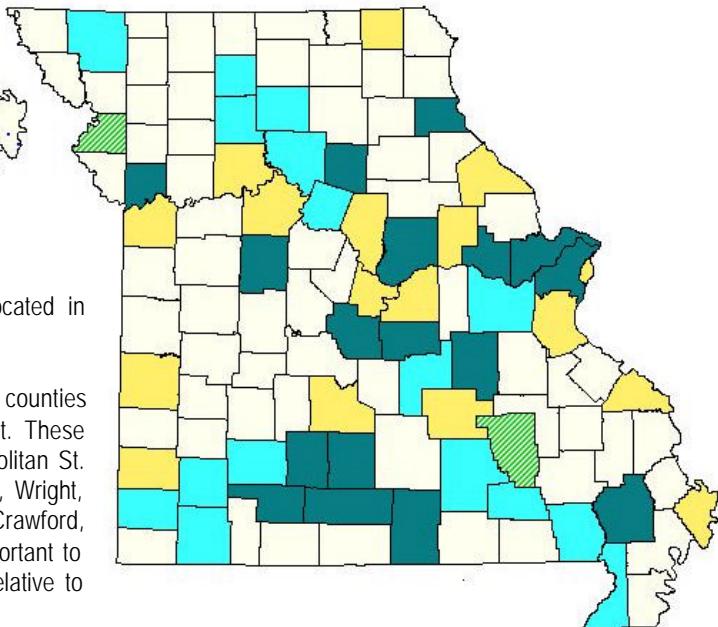
## EMPLOYMENT AND SPECIALIZATION, 2000

In 2000, the majority of advanced manufacturing jobs were located in metropolitan St. Louis, Kansas City, Springfield and Columbia.

According to specialization ratios (location quotients), 16 Missouri counties were highly specialized in advanced manufacturing employment. These areas were concentrated in south-central Missouri and in metropolitan St. Louis. The most specialized counties in the state were Douglas, Wright, Marion, Randolph, Miller, Howell, Callaway, Warren, Pettis, Clay, Crawford, Christian, Stoddard, St. Charles, St. Louis and Webster. It is important to note that SRs measure the proportion of industry employment relative to the state average, not the total number of jobs.

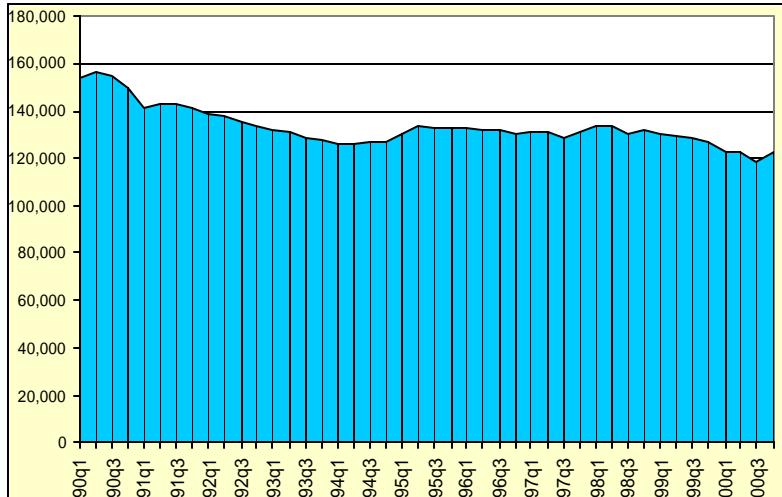
## Specialization Ratios

-  High Specialization
-  Above Average Specialization
-  Average Specialization
-  Below Average Specialization
-  Low Specialization



Source: *Covered Employment & Wages, MO Economic Development*

## EMPLOYMENT TRENDS, 1990-2000



- Advanced manufacturing employment in Missouri has decreased by -20.9% since 1990.
- The most current data estimates 121,520 advanced manufacturing jobs during 2000.
- Employment was highest during 2<sup>nd</sup> quarter 1990, with 156,379 jobs. Employment was lowest during 3<sup>rd</sup> quarter 2000, with 118,168 jobs.

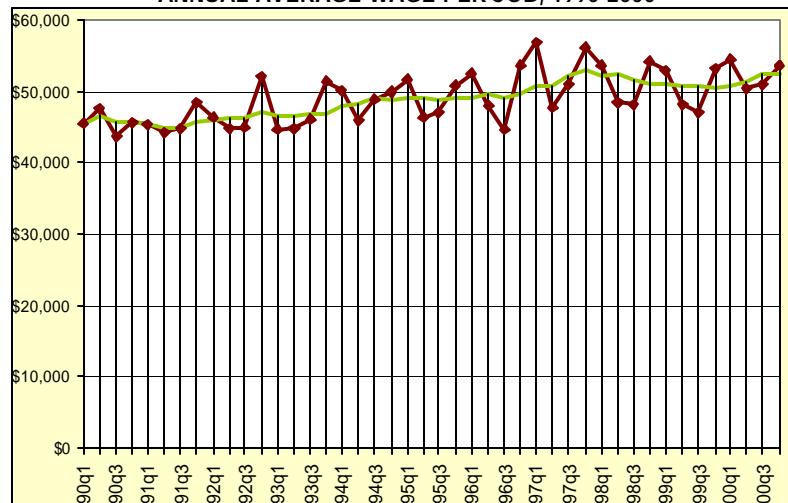
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## ANNUAL AVERAGE WAGE PER JOB, 1990-2000

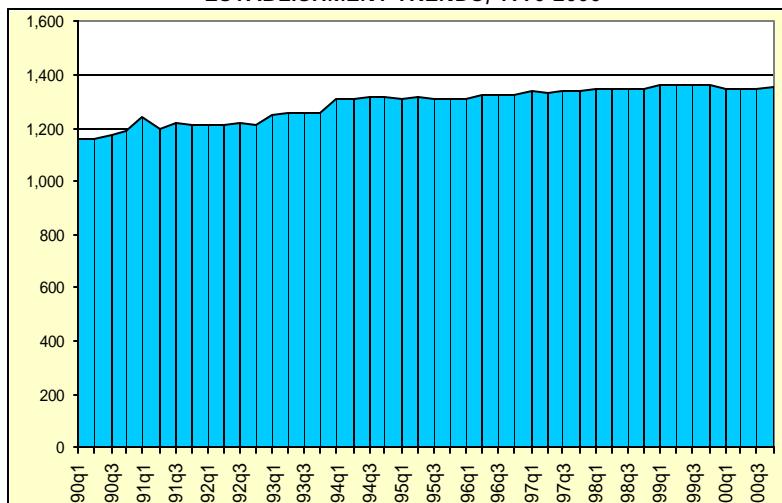
- Annual average wages per job in advanced manufacturing has increased by 14.9% since 1990.
- The most current data estimates an average wage per job of \$52,430 during 2000 - much higher than the state average wage of \$31,217.
- Average wages per job were highest during 1<sup>st</sup> quarter 1997, at \$56,816 per job. Average wages per job were lowest during 3<sup>rd</sup> quarter 1990, at \$43,776 per job.

Wages adjusted to 2000 real dollars. Quarter wages annualized.  
Green line represents four quarter rolling average.

Source: *Covered Employment & Wages, MO Economic Development*



## ESTABLISHMENT TRENDS, 1990-2000



- The number of advanced manufacturing establishments in Missouri has increased by 15.3% since 1990.
- The most current data estimates 1,348 advanced manufacturing establishments during 2000.
- Establishments were most numerous during 3<sup>rd</sup> quarter 1999, at 1,364 entities. Establishments were least numerous during 2<sup>nd</sup> quarter 1990, at 1,156 entities.

Source: *Covered Employment & Wages, MO Economic Development*